CLAIMS

1. A metal vapor discharge lamp, comprising:

(a) a translucent ceramic envelope, said ceramic envelope comprising a center bulb for defining a discharge space and side tubes being extended from both ends of said center bulb, said side tubes having outer diameters smaller than that of said center bulb, said center bulb and said side tubes being integrally molded;

(b) a pair of current suppliers extending through hollows of said side tubes respectively, each of said current suppliers comprising an electrode and a lead-in wire, said electrode being fixed with a coil disposed in said discharge space, a first end of said electrode being disposed in said discharge space, a second end of said electrode being connected with said lead-in wire;

(c) a sealant for hermetically sealing open ends of said side tubes to fix said lead-in wires to said side tubes; and

(d) a light-emitting metal contained in said discharge space, wherein

an inner wall of a seamless boundary portion between said center bulb and each of said side tubes has the smallest curvature radius of R_i mm,

an external wall of said boundary portion has the smallest curvature radius of R_o mm,

said center bulb has an inner diameter of D mm,

said lamp has an electric power of P watts, and

said curvature radius R_i, said curvature radius R_o, said diameter D and said electric power P satisfy:

Formula (1):

$-0.00076P + 0.304 \leqq R_i/D \leqq -0.00076P + 0.490$,

where $P \leqq 350$ watts; and

Formula (2): $1.28R_o \leqq R_i \leqq 1.39R_o$

2. The metallic vapor discharge lamp in accordance with claim 1, wherein

a distance (L_1) between said first end of said electrode and said open end of said side tube which is nearer to said first end, and

a distance (L_2) between said first end and a position where an inner wall of said nearer side tube begins to bend, satisfy:

Formula (3): $0.28 \leqq L_2/L_1 \leqq 0.38$